

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims that begins on page 4 of this paper.

Amendments to the Drawings begin on page 6 of this paper; the replacement sheet for Figure 7 accompanies the continuation application submitted herewith.

Remarks begin on page 6 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 2, line 25 with the following replacement paragraph:

Accordingly, the present invention provides an isolated nucleic acid sequence encoding an altered viral movement protein having the amino acid sequence shown in SEQ ID NOS.: 5 and 6 and altered 126/183 viral proteins. In one aspect, the isolated nucleic acid sequence is essentially identical to the sequence shown in SEQ ID NOS.: 3 and 4, and it contains a Thymine (T) or Uracil (U) residue at position 5212 5213 and Guanine (G) residue at 5303 as shown in Figure 1A. In another aspect, the isolated nucleic acid sequence is identical to the sequence shown in SEQ ID NOS.: 3 and 4. The alteration of the 30K movement protein and alteration of the 126/183 viral proteins results in an enhanced ability to facilitate stabilization of a transgene contained in a viral vector.

Please replace the paragraph beginning at page 3, line 5 with the following replacement paragraph:

In a separate embodiment, the present invention provides a viral vector comprising the nucleic acid sequence encoding an altered viral movement protein having the amino acid sequence shown in SEQ ID NOS.: 5 and 6 and altered 126/183 viral proteins. In one aspect, the viral vector exhibits an enhanced ability compared to a control viral vector to stabilize a transgene contained in the vector. Preferably, the vector is a tobacco mosaic viral vector. A particularly preferred vector is designated BSG1057 (deposited with American Type Culture

Collection, 10801 University Blvd., Manassas, VA 20110, having accession number 203981, which was deposited on April 28, 1999).

Please replace the paragraph beginning at page 3, line 26 with the following replacement paragraph:

Figure 1A depicts a comparison of the nucleotide sequences encoding an altered movement protein contained in the vector BSG1057 (SEQ ID NO.: 4) and the wildtype movement protein contained in the vector BSG1037 (SEQ ID NO.: 3). Sequence identities are indicated by *, and mismatches are indicated by -. **Figure 1B** depicts a second portion of the comparison depicted in Figure 1A.

Please replace the paragraphs at page 4, lines 9-10 with the following replacement paragraphs:

Figure 5A is the complete sequence of BSG1037 (SEQ ID NO.: 1). **Figures 5B, 5C, 5D, and 5E** depict second, third, fourth and fifth portions, respectively, of the complete sequence of BSG1037 (SEQ ID NO.: 1).

Figure 6A is the complete sequence of BSG1057 (SEQ ID NO.: 2). **Figures 6B, 6C, 6D, and 6E** depict second, third, fourth and fifth portions, respectively, of the complete sequence of BSG1057 (SEQ ID NO.: 2).

Please replace the paragraph beginning at page 10, line 3 with the following replacement paragraph:

In one embodiment, the present invention provides an isolated nucleic acid sequence encoding an altered viral movement protein having the amino acid sequence shown in SEQ ID NOS.: 5 and 6 and altered 126/183 viral proteins. In one aspect within this embodiment, the isolated nucleic acid sequence of the movement protein is essentially identical to the sequence shown in SEQ ID NO. 3, and it contains a Thymine (T) or Uracil (U) residue at position 5212 5213 and Guanine (G) residue at 5303 as shown in Figure 1A. As used herein, a linear sequence of nucleotides is “essentially identical” to another linear sequence, if both sequences are capable of hybridizing to form a duplex with the same complementary polynucleotide.